

DOCUMENT RESUME

ED 267 172

CE 043 013

TITLE Education for the World of Work. Report of the Joint Task Force.

INSTITUTION Colorado State Board for Community Colleges and Occupational Education, Denver. Div. of Occupational Education.; Colorado State Dept. of Education, Denver.

PUB DATE Jun 85

NOTE 25p.

PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Articulation (Education); Career Counseling; Career Education; Certification; College School Cooperation; Community Colleges; Competence; Cooperative Planning; *Educational Cooperation; Educational Philosophy; Educational Planning; *Educational Policy; *Education Work Relationship; Elementary Secondary Education; Employment Potential; Institutional Cooperation; *Integrated Curriculum; Job Skills; Postsecondary Education; *Statewide Planning; Teacher Education; *Vocational Education; Vocational Schools

IDENTIFIERS *Colorado

ABSTRACT

A task force convened by the Colorado State Board for Community Colleges and Occupational Education and the Colorado Department of Education met in 1984-85 to seek ways to bring vocational education, industrial arts education, and general education closer together in the preparation of students for entry into the world of work. This report addresses the following six basic charges given to the task force: (1) to recommend strategies for improving basic skill levels and employability skills of students; (2) to develop strategies to integrate general education, vocational/industrial/technical education, objectives, and programs; (3) to recommend strategies for improved career counseling and career education in K-12 and postsecondary schools; (4) to recommend appropriate roles of area vocational schools and community colleges and higher education institutions in the improvement of educational opportunities for all students; (5) to recommend establishing more meaningful relationships and interaction between businesses, industry, and public schools; and (6) to recommend desirable teacher education practices and certification and credentialing requirements for vocational educators and others, such as those who enter teaching through occupational experience. This report contains strategies recommended for each of these charges. In addition, the report includes operational suggestions related to each charge, a list of recommendations not directly related to the charges, a glossary of terms and definitions, a suggested list of desirable competencies, a career education progress chart, and revised paragraphs of the Colorado statutes. (KC)

EDUCATION FOR THE WORLD OF WORK

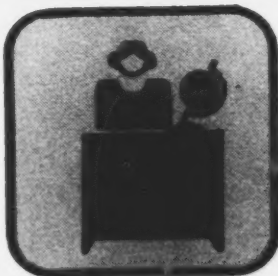
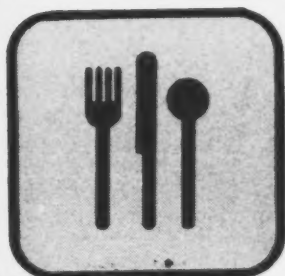
REPORT OF THE JOINT TASK FORCE

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

ED267172



SPONSORED BY

STATE BOARD FOR
COMMUNITY COLLEGES
AND OCCUPATIONAL
EDUCATION

COLORADO
DEPARTMENT OF
EDUCATION



CE 043 013



"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

D. Horrell

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

JUNE 1985
DENVER, COLORADO

TABLE OF CONTENTS

	Page
Table of Contents	i
Sponsors	ii
Task Force Members	iii
Letter from Directors	iv
Profile of Recommendations	2
Charge #1	
Recommend Strategies for Improving the Basic Skill Level and Employability Skills of Students	4
Charge #2	
Develop Strategies to Better Integrate General Education, Vocational/Industrial/ Technical Education Objectives and Programs	5
Charge #3	
Recommend Strategies for Improved Career Counseling and Career Education in K-12 and Postsecondary Programs	6
Charge #4	
Recommend Appropriate Roles of Area Vocational Schools, Community Colleges, and Higher Education Institutions in the Improvement of Education Opportunities for all Students	7
Charge #5	
Recommend Establishing More Meaningful Relationships and Interaction Between Business, Industry, and Public Schools	8
Charge #6	
Recommend Desirable Teacher-Education Practices	10
Additional Recommendations	10
Appendix	13
Terms and Definitions	15
Desirable Competencies	17
Career Education Progress Chart	20
Colorado Revised Statutes	21
Statutory Definitions	

SPONSORS

SBCCOE

Board Members

C. Gordon Dickinson, Chair
Ross Forney
Fred Valdez
Angelo Daurio
Thomas Grimshaw
Elinor Greenberg
Jane Quimby
Isaiah Kelley, Jr.
Raymond "Buzz" Wilder
Susan Crafton

CDE

Board Members

Donald Ament, Chairman
J. David Huskin
Dr. Richard Kraft
Dr. Tom Howerton
Sybil Downing
Warren Gilbertson
Art Pansing

STAFF

Darrell Anderson
Co-Director of Task Force
May Howell
Administrative Intern

Arvin Blome
Co-Director of Task Force
Doug Johnson
Unit Director
Career Development/Equal Opportunity

ADVISORS

Judy Gilbert
John Akey
Chris Comins
Roberta Kunze
Richard Husart
Senator Ray Peterson

English Consultant—CDE
Science Consultant—CDE
Math Consultant—CDE
Career Counselor
Consultant—Employability Skills Project
District 32

OTHER

Leonard Hergenreter
Rona Wilensky

Former Director
Former Assistant to Governor Lamm

TASK FORCE MEMBERS

Linda Lang, Co-Chair

Contractor
Fort Collins, CO

Maxine Albers

County Commissioner
3054 F. Road
Grand Junction, CO

James Burks

Superintendent
Aspen School District I
Aspen, CO

JoAnn Corn

Hospital Director
St. Anthony Hospital Sys.
1551 West 84th
Westminster, CO

Sue Craig

Counselor
P.O. Box 1924
Rifle, CO

Dean Damon

Superintendent
Bennett School Dist. 29J
P.O. Box 68
Bennett, CO

Dr. Mary Davis

CCHE
Denver, CO

Charles Tedrow

Industrial Ed. Dept.
Univ. So. Colorado
Pueblo, CO

Byron Tucker, Director

Warren Occupational Center
13300 West Ellsworth
Golden, CO

Beverly B. Fritschner

President
BBF and Associates
P.O. Box 996
Boulder, CO

Carlene Gibson

Vocational Teacher Education
Univ. of Northern Colo.
Greeley, CO

Dr. Tom Hergenreter

Vocational Director
1115 North El Paso
Colorado Springs, CO

Dr. Les Litherland, Co-Chair

Technology Educator
Wheat Ridge, CO

Dr. Bill Johnson, Dean

College of Professional Studies
Colorado State University
Fort Collins

Randy Dunning

Graduate
Route 1, Box 85
Holly, CO

Dr. Bernard Dutton

Industrial Tech. Dept.
Western State College
Gunnison, CO

Shirley Hornung

Parent
Stratton, CO

Lonnie Nations

President, ASA Welders
P.O. Box 1501
Cortez, CO

Carol Neuman

Library Media Specialist
Boulder Valley Schools
P.O. Box 9011
Boulder, CO

Jane Oehm

Parent Teacher Assn.
2675 Taft Court
Lakewood, CO

Debbie Pool

Local Board Member
1431 East Cornell
Englewood, CO

Bill Smith

Colorado Vocational Assn.
6195 Dudley
Arvada, CO

Bill Lehman

Industrial Arts Teacher
Coronado High School
1590 West Fillmore St.
Colorado Springs, CO

Dorothy Minkel

Retired
1531 Leyden Street
Denver, CO

SBOCCE

STATE OF COLORADO

code

STATE BOARD FOR COMMUNITY COLLEGES
AND OCCUPATIONAL EDUCATION

Colorado Department of Education

1311 Sherman Street, Suite 215
Denver, Colorado 80203
(303) 866-3162

First Western Plaza
303 West Colfax Avenue
Denver, CO 80204

June 6, 1985

Dear Colleague:

During the summer of 1984, members of the State Board for Community Colleges and Occupational Education (SBOCCE) and the State Board of Education (SBE) met to seek ways to bring vocational education, industrial arts education, and general education closer together in the preparation of students for entry into the world of work. The two boards convened the Joint Task Force Education for the World of Work to examine the issues and to make recommendations.

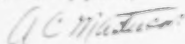
The Task Force completed its report in January 1985. The chairs, Linda Murphy and Les Litherland, made a presentation at a joint meeting of the boards in February, and both boards accepted the report at their regular meetings.

We have selected four of the recommendations as a priority for implementation:

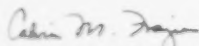
1. Integrating the vocational/academic curriculum
2. Establishment of the World of Work Resource Center
3. Creation of a student/teacher in-state exchange program
4. Revitalization of teacher education programs as exciting projects for joint activities

Please call on us when you feel there is a way our agencies can help you use this report. Members of the Task Force are available to make presentations to your organizations, and we will be pleased to help you make the arrangements.

Sincerely yours,



A. C. Masterson, Interim Director
Occupational Education
State Board for Community Colleges and Occupational Education



Calvin M. Frazier, Commissioner
Colorado Department of Education

1J 5-AB MH

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

**REPORT FROM THE
CDE/SBCCOE JOINT TASK FORCE
EDUCATION FOR THE WORLD OF WORK
INTRODUCTION**

During the summer of 1984, representatives of the State Board for Community Colleges and Occupational Education (SBCCOE) and the Colorado Department of Education met to seek ways to bring vocational education, industrial arts education, and general education closer together in the preparation of students for entry into the world of work. The two Boards convened a Task Force to examine the issues. This Task Force is composed of persons representing the education and business communities, and parent and student groups. Its purpose is to recommend specific strategies which will help resolve the issues raised by the two Boards. The Task Force received its charges in August of 1984 and set January of 1985 as the deadline for completing the assignment.

THE CHARGES

The Boards asked the Task Force to:

- A. Examine vocational/industrial/technical education activities, including business, in Colorado and other states.
- B. Provide recommendations on the purposes of secondary schools with respect to preparation for postsecondary education, entry into the world of work, citizenship, and personal/family/life endeavors, and the role of vocational/industrial/technical education.

Under these overall statements the Boards listed six distinct charges:

1. Recommend strategies for improving basic-skill levels and employability skills of students.
2. Develop strategies to better integrate general education, vocational/industrial/technical education, objectives and programs.
3. Recommend strategies for improved career counseling and career education in K-12 and postsecondary schools.
4. Recommend appropriate roles of area vocational schools and community colleges and higher education institutions in the improvement of education opportunities for all students.
5. Recommend establishing more meaningful relationships and interaction between businesses, industry, and public schools.
6. Recommend desirable teacher-education practices, certification and credentialing requirements for vocational educators and other alternatives, such as those who enter the profession by virtue of occupational experience, including testing requirements.

THE PROCESS

The Task Force identified its major focus in answering these charges to be the identification of the most desirable student competencies and then to propose strategies for students to achieve these competencies.

The Task Force met six times for all day sessions to study the current status of vocational/technical industrial education in Colorado; to review the Report from the Governor's Task Force for Excellence in Education as well as the Reports from the Renaissance Task Forces of the Department of Education; and, to examine other state and national reports on education. Testimony was presented by experts from the fields of business and education.

The Task Force recognizes that implementation of the recommendations will require combined efforts of the SBCCOE, CDE, local schools and school districts, the parents, business people, the legislature, community groups, and students.

FORMAT OF THE REPORT

In addition to the recommended strategies presented for each charge, the report includes Operational Suggestions related to each charge; a list of recommendations not directly related to the charges; a glossary of terms and definitions; and a suggested list of desirable competencies.

PROFILE OF RECOMMENDATIONS

The Education for the World of Work Joint Task Force adopted the following statements as fundamental concepts to the decisions it made in responding to the charges presented by the two boards.

A. PREPARATION FOR THE WORLD OF WORK IS AN APPROPRIATE GOAL FOR PUBLIC EDUCATION, SINCE ALL PEOPLE WILL BE EMPLOYED, BEGINNING IN KINDERGARTEN AND CONTINUING THROUGH GRADE FOURTEEN.

B. SCHOOLS HAVE A RESPONSIBILITY FOR ASSISTING STUDENTS IN THE INTEGRATION OF PERSONAL/FAMILY LIFE WITH THE SCHOOL AS IT RELATES TO CAREER DEVELOPMENT AND PREPARATION FOR THE WORLD OF WORK. EACH SCHOOL DISTRICT, GIVEN ITS UNIQUE SITUATION, SHOULD OFFER VOCATIONAL EDUCATION FOR SPECIFIC SKILLS AT APPROPRIATE LEVELS AND FOR NECESSARY PERIODS OF TIME.

The rationale for accepting these statements include the following beliefs:

- a. All people will be employed.
- b. Public education has the responsibility to provide for the education of all students regardless of career objectives.

RECOMMENDATIONS

1. Student Career/Education Plans

Develop an individualized career/education plan for each student, prior to entrance into high school, to provide direction for the student's educational pursuits and achievement of identified levels of competence.

2. Graduation Requirements

Define graduation requirements in terms of levels of achievement and competencies required for the world of work rather than in course or time requirements. Requirement levels should be determined by local districts.

- Provision should be made for evaluation and assessment at agreed upon age levels.

- Students should be allowed to acquire the competencies through a variety of teaching/learning strategies.
- Funding should not be denied to schools which offer and supervise non-traditional opportunities.

3. Access

- Provide opportunities for enrollment into programs in post-secondary institutions for secondary students when desired programs are not available in their high schools.
- Instructional programs should provide for open entry/exit so education and work can occur simultaneously in lifelong learning.
- Barriers between institutions should be eliminated if they unreasonably interrupt the flow of a student's education.

4. Teacher/Administrators

- Assist teachers, counselors, and administrators in receiving work experience to help them relate education to the world of work.

5. Educational Opportunities

Emphasize that:

- The role of comprehensive high schools, area vocational schools, community colleges, and higher education institutions includes providing job entry-level skills and experiences.
- Accessibility and articulation between levels of education expand and improve educational opportunities.
- Full funding for the Colorado Vocational Act will insure continuation of quality vocational programs in secondary schools.

6. Interaction Between Business and Schools

- Provide opportunities through the schools for business, industry, and government people to become better acquainted with and involved in educational programs.
- Establish opportunities for educators and staff to learn strategies for working with public and private resources.

7. In-State Student Exchange

Design an in-state student exchange program in order to provide broad employability experience as well as social/cultural experiences for students.

The Education for the World of Work Joint Task Force asks for your joint cooperation in implementing these recommendations because many of the areas of competence identified by this Task Force and the Operation Renaissance groups such as Citizenship Education and Education for the World of Work need to be addressed as topics of study that cross the boundaries of the many content area disciplines. Whether students are interested in the area of vocational, technical, or general education, they should all be expected to have knowledge of the rights and responsibilities of citizens and workers.

CHARGE #1

RECOMMEND STRATEGIES FOR IMPROVING THE BASIC-SKILL LEVEL AND EMPLOYABILITY SKILLS OF STUDENTS

RECOMMENDATIONS

- A. Local districts should define graduation requirements in terms of locally acceptable levels of competence for all students. Areas of competence, related to the world of work, which this Task Force feels are appropriate for all students to learn, are identified in the Appendix.
- B. Local Districts should make provision for evaluation and assessment of the students at agreed upon grade levels to assure that they can demonstrate the accepted level of competence prior to graduation from high school.
- C. Curriculum and program development efforts in all areas should include input from representatives from business and industry. Funds allocated for curriculum development should have a portion designated for this involvement.
- D. State funding should be allocated for technical assistance to local districts and schools for defining student competencies in the development of curriculum, assessment, and evaluation instruments, and procedures.
- E. The State Boards should establish a World of Work Resource Center. The Center should incorporate all available resources including those developed by business and industry as well as technology (present and future) which will support the instructional programs.

CHARGE #1

OPERATIONAL SUGGESTIONS:

1. Encourage high standards of study skills and teach study skills.
2. Encourage cooperative work experience for all students.
3. Make internship programs available to more students.
4. Encourage participation in vocational and other youth organizations.
5. Provide opportunities for meaningful involvement in school/life decision making situations.
6. Implement career development centers; encourage the use of student portfolios.
7. Promote integration of basic skills through team-teaching.
8. Find effective and challenging ways to integrate the last two years of high school and postsecondary education.

CHARGE #2

DEVELOP STRATEGIES TO BETTER INTEGRATE GENERAL EDUCATION, VOCATIONAL/INDUSTRIAL/ TECHNICAL EDUCATION OBJECTIVES AND PROGRAMS

RECOMMENDATIONS:

- A. Educational programs and activities should focus on the goals, aspirations, and abilities of students. To sharpen this focus, each program should reinforce the knowledge and skills being taught in other programs. Secondary students should also have access to programs in postsecondary institutions when desired programs are not available in their high schools.
- B. Students should be informed of the competencies required for graduation through various approaches.
- C. A variety of teaching-learning strategies should be available to students. Students should be able to acquire the required competencies through general and vocational course work; counseling; work experience; and/or community experiences and funding should not be denied to schools where such opportunities are offered and supervised.
- D. A joint CDE/SBCCOE resource team should be available to assist local educators in implementing the recommendations of the World of Work Task Force. The team should work with consultants from the other Task Forces to provide a coordinated effort in implementing the Operation-Renaissance recommendations. They should also work to implement those recommendations made by the Governor's Task Force for Excellence in Education which apply jointly to the two boards.
- E. School District Accountability Committees/Advisory Committees should include representation from business and industry.
- F. Offer opportunities and additional funding for pre-vocational exploration at the junior high (middle school) level.

EXPLORATION MAY INCLUDE:

- ways to discover personal abilities and interests
- opportunities for experiencing different kinds of work through cooperative education work experience; internships; shadow programs, community services; etc.
- involvement in extensive career guidance

OPERATIONAL SUGGESTIONS:

1. At elementary level, offer students opportunities for exposure to and awareness of all kinds of work.
2. Integrate curriculums and make use of interdisciplinary teaching.
3. Study teaching and learning research in order to implement new techniques. (This will require attention at the teacher-education level and for in-service workshops.)
4. Use business people to demonstrate to teachers how the various programs and subject matter interrelate in the world of work.

CHARGE #3

RECOMMEND STRATEGIES FOR IMPROVED CAREER COUNSELING AND CAREER EDUCATION IN K-12 AND POSTSECONDARY PROGRAMS

RECOMMENDATIONS:

- A. Each student should be assisted by parents, counselors, and teachers in developing a career/educational plan, preferably before entrance into high school. The plan should include opportunities to explore career options, interests, aptitudes, and an introduction to the concept of lifelong-learning. The purpose of the plan is to provide individualized direction for the student's educational pursuits and achievement of identified levels of competence. The individual career/education plan should be updated annually. In the elementary grades, students should be involved in work awareness activities. These activities should be specified in an articulated K-14 program.
For those students who proceed into postsecondary institutions, the focus should be on more specific career planning, preparation, and job search strategies.
- B. In-service and staff development time should be allocated to update counselors, advisors, and principals in assisting students in the development of career/education plans.
- C. The Task Force recommends the progress chart for career education found in the Appendix as a helpful guide for local school districts.

CHARGE #3

OPERATIONAL SUGGESTIONS:

1. Implement career centers for employment education; require the creation of a portfolio, including the career/education plan, for each student.
2. Local school districts should do a systematic follow-up study on their students after they leave school.
3. Make use of the student interest surveys, ability testing, and any means available to assist students to understand themselves better; to make realistic career and educational plans, and to choose appropriate training, programs, and alternative experiences to achieve their goal.
4. Equip counseling centers with state-of-the-art technological equipment to assist in student evaluation and assessment.
5. Encourage students to participate in vocational and other youth organizations.
6. Develop life situation simulations in counseling to illustrate problems and to teach decision making skills.
7. Allow and encourage retired, business, and community individuals to assist in guidance and counseling.

CHARGE #4

RECOMMEND APPROPRIATE ROLES OF AREA VOCATIONAL SCHOOLS, COMMUNITY COLLEGES, AND HIGHER EDUCATION INSTITUTIONS IN THE IMPROVEMENT OF EDUCATION OPPORTUNITIES FOR ALL STUDENTS

RECOMMENDATIONS:

- A. The Task Force endorses the legislatively defined roles of the schools as found in the Colorado Revised Statutes (see Appendix); however, it recommends that improved accessibility and articulation between levels of education are vital to expanding and improving education opportunities for all students.
- B. The role of comprehensive high schools, area vocational schools, community colleges and higher education institutions includes providing specific job entry level skills and experiences.
- C. Students should be allowed to graduate from high school when they complete graduation requirements and then be allowed to begin post-high school educational programs. Barriers between institutions should be eliminated if they unreasonably interrupt the flow of a student's education. Barriers may include a four-year attendance requirement for high school graduation, the prerequisite of a diploma for postsecondary matriculation, funding restrictions.
- D. Educational progress in the schools should take into account the goals, aspirations, and abilities of students as they relate to preparation for the world of work. Secondary general and vocational education, post-high school educational institutions, and the community should cooperate to provide necessary instructional programs for the youth they serve. These programs should work cooperatively to provide the mechanism for open entry/exit so education and work can occur simultaneously throughout one's lifetime. Programs should offer an efficient continuum along which individuals are free to make choices about their educational needs but which assume that neither twelve years of schooling nor eighteen as the age of choice are magical.

CHARGE #4

OPERATIONAL SUGGESTIONS:

1. The following briefly described programs are now in place in some community colleges and area vocational schools. It is recommended that they be continued and enriched in order to improve educational opportunities for all students.
 - a. Fast Track and Advanced Placement programs which allow students to enroll in classes in postsecondary institutions while still at their home high schools.
 - b. Customized Training programs which facilitate the training and preparation of employees for particular employment needs required by business and industry.

- c. Contract programs in which students may be enrolled in area vocational schools outside of their local school district when facilities are not available in the home district. This is a successful program which makes opportunities for vocational training available.
2. Guidance, counseling, and training centers for displaced workers should be made available at more locations and in greater depth.
3. Small Business Services Centers are being developed and should be supported as an opportunity for students to learn entrepreneurship skills and as an opportunity for business and education to work cooperatively.

CHARGE #5

RECOMMEND ESTABLISHING MORE MEANINGFUL RELATIONSHIPS AND INTERACTION BETWEEN BUSINESS, INDUSTRY, AND PUBLIC SCHOOLS

RECOMMENDATIONS:

- A. Local school districts should provide opportunities for local business, industry, and government people to become acquainted with and involved in their educational program.
- B. Local school districts, in cooperation with teacher-education institutions, should establish opportunities for their staff and teachers to be trained in the strategies of working with both the private and the public sector in order to more effectively utilize community resources.
- C. Local school districts should assist school personnel to become acquainted with employment opportunities and the pertinent skills required in local business and industry.
- D. Obtain information from business, industry, labor, government, and professions concerning how they feel educational programs need to be altered to produce students who are better able to enter those fields of work.
- E. School districts should make greater utilization of people from various community enterprises as part-time teachers.
- F. Bring community and schools closer together by bringing parents into the schools.
- G. To assure that students have acquired the appropriate basic skills for each new level of education and for successful entry into the world of work, communication and cooperation between instructors, schools, and business people is necessary.

CHARGE #5

OPERATIONAL SUGGESTIONS:

1. Offer opportunities for career exposure and exploration in businesses.
2. Teach an understanding of business operations and the Free Enterprise system; stress factors of employer/employee relationships; the concepts of profit and loss and entrepreneurship.
3. Assist in teaching business and personal economics.
4. Teach the role of citizens - the knowledge they require and responsibility for participating in society.
5. Encourage teachers to join and to be involved with civic groups and community activities.
6. Encourage teachers to meet with business people in informal settings.
7. Ask business/industry to help make learning opportunities available outside of the classroom.
8. Keep business people informed about school/district requirements relating to attendance, curriculum, homework, work (hours, credit, evaluation).

CHARGE #6

RECOMMEND DESIRABLE TEACHER-EDUCATION PRACTICES, CERTIFICATION AND CREDENTIALING REQUIREMENTS FOR VOCATIONAL EDUCATORS AND OTHER ALTERNATIVES, SUCH AS THOSE WHO ENTER THE PROFESSION BY VIRTUE OF OCCUPATIONAL EXPERIENCE, INCLUDING TESTING REQUIREMENTS

****NOTE:** *The Task Force believes that the following recommendations apply to all educators and administrators in both general and vocational education.*

RECOMMENDATIONS:

- A. Teacher certification requirements should continue to be based on well-defined demonstration of competence and knowledge of the teaching field. The competence and knowledge may be achieved through occupational experience as well as university course work.
- B. School districts, teacher education, and business should assist both teachers/administrators in training and employed teachers to secure practical work experience in their respective subject matter areas to help them relate subject matter content to the world of work. The "connectedness" or transfer of work experience to teaching is a critical factor in the effectiveness of these experiences.
- C. Teacher-education programs should include a requirement that teachers and administrators achieve a demonstrable knowledge of the world of work. This knowledge may be attained through university course, work, volunteer work, and/or other work experience.
- D. A joint CDE/SBCCOE and private sector program should be established to provide in-service courses to all teachers, administrators, counselors, and teacher educators on future needs of the world of work.
- E. By 1988, all teachers should:
 - Receive in-service credit for successful work experience. (Employers should be requested to assist in evaluating the teachers' experience and in helping the teachers meet the goals of the work experience.)
 - Be held responsible for providing evidence of world of work literacy as a condition for re-certification.
 - Be able to utilize in-service and work experience in certification, re-certification, and credentialing.
- F. Certification requirements for secondary school administrators and counselors should include adequate preparation in vocational education.

CHARGE #6

OPERATIONAL SUGGESTIONS:

1. A university teacher education fast track program should be developed for people transferring into education from other careers.
2. A manual for teachers should be published to develop the understanding and skills for working effectively with business people. The manual should be used in both pre-and in-service teacher training.

**ADDITIONAL RECOMMENDATIONS WHICH THE
TASK FORCE BELIEVES ARE PERTINENT BUT WHICH
DO NOT RELATE SPECIFICALLY TO ANY ONE OF THE CHARGES:**

1. Design in-state student exchanges for the purpose of providing broad employability experience as well as social/cultural experiences for students. A pilot project should be implemented with sufficient duration to provide an adequate data base for evaluation. This should be a joint CDE/SBCCOE project. Broad-based involvement in planning this project should be sought from parent and community groups and from business and industry.
2. Design and pilot test an in-state teacher exchange program in order to broaden the experience base of teachers.
3. Emphasize the importance of the public schools becoming education centers for continuing education and encouraging students to return for lifelong learning opportunities. Sabbatical policies should encourage teachers to enter or re-enter the world of work periodically.
4. Assure equal access for students desiring to pursue occupational goals.
5. Review the requirements and standards of special, vocational, and general education as they relate to improving coordination and cooperation between the programs.
6. Seek full funding for the Colorado Vocational Act to insure the continued opportunity to offer quality vocational programs in secondary schools.
7. Require school districts to follow up on students—the superior, the average, and the troubled dropout—to learn how they feel educational opportunities might be improved.
8. Request that the Joint CDE/SBCCOE Task Force for Education for the World of Work remain active to serve in an advisory capacity and to assist in implementing its recommendations. The Task Force has chosen to meet twice in 1985 and will submit follow-up reports to both boards. In addition, members of the Task Force would be available to make presentations related to the report.

APPENDIX

TERMS WHICH WILL BE USED DURING THE DISCUSSION
DEFINITIONS

1. VOCATIONAL EDUCATION

Training for job skills for entry level employment at less than baccalaureate level and/or retraining for gainful employment.

2. OCCUPATIONAL EDUCATION

A continuum of educational activities including career awareness, career orientation, career exploration, vocational education, and the ancillary services necessary to support vocational education (including vocational guidance and counseling and job placement; teacher education, supervision, and administration).

3. CAREER EDUCATION

A systematic, comprehensive, and continual learning process from kindergarten through post-high school, utilizing classroom curricula and community resources, designed to assist the individual student in career awareness, career orientation, career exploration, and the specific skill training necessary for preparation for life roles and careers.

4. INDUSTRIAL ARTS EDUCATION

An educational program consisting of a course or series of courses designed for the development of an understanding of industrial and technological processes and to explore a variety of meaningful occupational choices, including learning experiences involving activities such as experimenting, designing, constructing, evaluating, and using tools, machines, materials, and processes.

5. EMPLOYABILITY SKILLS

Skills and the application of these skills which have been identified by employers and employees as essential for securing employment and for success on the job.

6. BASIC SKILLS

Skills necessary to be functional in our society as a citizen, an employer, and an employee may include reading, writing, arithmetic, and communication skills; may also include computer literacy, decision making, and problem solving.

7. WORK

Conscious effort, other than activities whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or for oneself and others.

8. CITIZENSHIP

Duties, rights, and responsibilities as well as privileges of a member of the state and nation. Understanding of the economic system and participation in the system.

9. GENERAL EDUCATION

Knowledge and abilities gained in universal education; not focused on specific employment or college preparation.

10. ELEMENTARY SCHOOL - usually grades 1 through 6

JUNIOR HIGH - usually grades 7 through 9

MIDDLE SCHOOL - usually grades 6 through 8

HIGH SCHOOL OR SECONDARY SCHOOL - usually grades 9 through 12

COMMUNITY (JUNIOR) COLLEGE - grades 13 through 14, often offering Associate Degrees

UNIVERSITY - usually the four-year institutions offering baccalaureate and higher degrees

POSTSECONDARY - any education following graduation from high school

K-14 - kindergarten through grade 14

11. COMPETENCY-BASED EDUCATION

Specific skills to be learned in a given area. Provides a curricular structure and instructional methodology that is not time-frame based. It provides measurement of competence.

12. WORK ETHIC

The rules, standards, and attitudes governing the conduct of the members of a specific work group.

13. EMPLOYMENT

A commitment to work in a directed effort for the benefit of an organization or employer.

14. JOB SPECIFIC SKILLS

Manipulative and academic skills which apply to particular employment.

15. CONSUMER EDUCATION

Skills required by an individual in order to be functional in life as opposed to preparation for employment.

16. DISCIPLINE

Specific teaching area; i.e., English.

17. PORTFOLIO

A portable folder containing a record of a student's development, career and educational goals. Contents may include a profile of student's aptitudes, interests, skill achievements, and work experiences; identification of the short- and long-range career and educational goals, and an analysis of the experience and school course work needed to meet these goals.

DESIRABLE COMPETENCIES

These competencies should be incorporated into the goals and objectives of the K-14 curriculum.

1. PREPARATION FOR ENTRY LEVEL JOBS AND CAREER CHANGES

- Participate in job training
- Pursue education concurrently with job
- Become aware of company operations
- Learn about employee benefits/responsibilities
- Suggest and/or make work place improvements
- Accept additional responsibilities
- Maintain consistent effort
- Make efficient use of new technology
- Work with minimal supervision
- Adapt to different job assignments
- Maintain acceptable personal appearance
- Keep work area clean and organized
- Exhibit interest in future of organization
- Indicate interest in future career development
- Maintain punctuality and attendance at work
- Understand basic business economics
- Adapt to changes in the work place

2. OPPORTUNITY TO DEVELOP SPECIFIC SKILLS

OPPORTUNITY TO DEVELOP JOB-SPECIFIC SKILLS

- Manual/perceptual tasks
- Construct, assemble materials
- Use job-specific hand tools
- Develop visual presentations
- Use keyboard skills
- Operate job-specific power equipment

APPLICATION OF BASIC SKILLS

- Require work and school work accuracy
- Do things right the first time to successfully meet the expectations of employers
- Application of reasoning skills in solving on-the-job problems
- On-the-job work experience

3. JOB READINESS: JOB APPLICATION AND INTERVIEW

- Ability to prepare a resume correctly
- Ability to prepare an application accurately
- Ability to be interviewed effectively

4. COMMUNICATION SKILLS

- Give clear oral instructions and directions
- Explain activities and ideas clearly
- Stay on the topic in job-related conversations
- Present information effectively to groups
- Speak clearly
- Participate effectively in discussions
- Use appropriate vocabulary/grammar
- Follow intent of oral instructions
- Listen attentively

WRITING TASKS

- Write legibly
- Complete sentences in standard English
- Organize, select, and relate ideas in a logical and coherent manner
- Produce reports and summaries
- Identify and correct errors in writing
- Use reference books

5. PROBLEM SOLVING/REASONING TASKS

- Identify the problem—use five-step scientific problem solving process
- Determine work activities
- Use appropriate procedures
- Obtain resources
- Conduct work in appropriate sequence
- Recognize the effects of changing the quantity or quality of materials
- Collect and organize material
- Analyze and synthesize information
- Identify alternative approaches
- Review progress periodically
- Evaluate for accuracy and completeness
- Correct deficiencies
- Deliver completed work on time
- Devise new ideas and better work methods
- Develop high level critical thinking and learning skills; formulate questions and find answers

6. INTERPERSONAL TASKS

- Function cooperatively with co-workers
- Function cooperatively as a team member
- Adhere to company policies and regulations
- Cooperate with clients and customers
- Exhibit openness and flexibility
- Exercise patience and tolerance
- Accept and offer constructive criticism appropriately
- Exhibit leadership
- Understand supervisory authority and worker responsibility
- Understand and apply appropriate work ethics
- Display appropriate work habits of promptness, productivity, etc.
- Develop self-esteem; positive self-image
- Learn mid-level management skills
- Take pride in self and in workmanship
- Develop loyalty to employer
- Interact in a socially appropriate manner
- Demonstrate respect for the opinions/customs, and individual differences of others

7. MASTERY OF BASIC SKILLS (see definition)

MASTERY OF EMPLOYABILITY SKILLS (See definition)

READING

- Read for details and specific information
- Interpret pictorial information
- Use source materials
- Follow intent of written instructions
- Interpret ideas and concepts
- Read accurately within a given time

MATHEMATICS

- Estimate results and judge their accuracy
- Handle basic calculations
- Estimate quantities needed to do a job
- Calculate costs
- Use values from charts, diagrams, manuals
- Construct diagrams, charts, records
- Make and use measurements
- Use formulas
- Use calculators to complete above tasks
- Computer tasks
 - Become aware of computer functions
 - Input data into computers
 - Access data from computers
 - Perform simple programming
 - Perform word processing

8. BUSINESS RELATED OUTCOMES

- Offer opportunities for career exploration
- Understand business operations and the Free Enterprise System including:
 - factors of employee/employer relationships
 - productivity and profit
- Understand business and personal economics
- Understand role of citizens; knowledge and participation
- Recognize and deal with stressful situations

CAREER EDUCATION PROGRESS CHART

The following is a suggested sequence for students for preparation for entry into the world of work.

ELEMENTARY AWARENESS LEVEL (ALL STUDENTS)

In this plan, elementary students would receive orientation units in becoming aware of the importance of education to their futures, its impact on society, and units for exposure to the world of work. Mastery of basic skills starts at this level so competencies and achievement levels need to be identified which are appropriate for this age level.

JUNIOR HIGH/MIDDLE SCHOOL EXPLORATION LEVEL (ALL STUDENTS)

In the junior high or middle school, the students begin exploring the inter-relationships of business, industry, society, the technologies, and the values and attitudes relating to the world of work. Introduction to application of basic skills to everyday life and potential careers is vital at this age.

LOWER SENIOR HIGH DECISION MAKING LEVEL (MINIMUM ONE SEMESTER)

In the lower senior high level, one semester courses should be developed which orient the student to the major occupational clusters in more depth. These courses will stress values and attitudes needed for succeeding in the world of work. Career counseling and career decision making processes should be emphasized at this level for students to determine their planned education program be it college preparation for the professions or skill development for those occupations which do not require a college degree.

UPPER SENIOR HIGH GRADES, 11 AND 12 THROUGH GRADES 13 AND 14

This level is divided into two areas: (1) VOCATIONAL PROGRAMS, and (2) ADVANCED TECHNICAL STUDIES.

Instruction and methodology used in all areas should include attention to application of basic and employability skills in the world of work.

COLORADO REVISED STATUTES

The Statutes provide the statutory definitions of area vocational schools and community colleges and define the role and mission of each.

A. 23-60-103 p. 246

"Area vocational school" means a school offering approved postsecondary vocational programs for credit, operated by a local school district or by a board of cooperative services, and designated by the general assembly as an area vocational school in conformity with standards established by the State Board for Community Colleges and Occupational Education. Tuition rates fees charged any person not enrolled in a secondary school curriculum shall be uniform for any group classification. For the purpose of this article, the following are declared to be area vocational schools: The Emily Griffith Opportunity School, the Boulder Valley Area Vocational School, the Larimer County Area Vocational School, the San Luis Valley Area Vocational School, the San Juan Basin Area Vocational School, the Delta-Montrose Area Vocational School, and the T.H. Pickens Technical Center.

B. 23-60-101 p. 371

... in conformity with the plan for the development of higher education ... which includes a system of state general colleges, the functions of which shall principally be those of undergraduate education; a system of universities and special-purpose institutions conducting extensive graduate and research programs, as well as providing courses in undergraduate education; and a system of two-year colleges conducting occupational, technical, and community service programs, with no term limitations and general education, including college transfer programs, with unrestricted admissions ... to develop appropriate occupational education and adult education programs in these and other postsecondary educational institutions, to maintain and expand occupational education programs in the elementary and secondary schools of the state permitting local school districts and to develop work study and on-the-job training programs designed to acquaint youth with the world of work and to train or retrain youth and adults for employment. The general assembly intends that state agencies concerned with occupational education in the public schools and community colleges shall cooperate in the planning and coordinated development of occupational programs, to the end that the state of Colorado has a complete and well-balanced occupational and adult education program available to the people of Colorado at all educational levels.